REMARKS

In the Official Action mailed on April 22, 2004 the Examiner reviewed claims 1-51. The abstract was objected to because the abstract was written exceeding 150 words in length. The specification was objected to because the information in the related applications section needs updating. Claims 1-51 were rejected under 35 U.S.C. §101 because the claimed invention was directed to non-statutory subject matter. Claims 1-15, 18-32, and 35-49 were rejected under 35 U.S.C. §102(b) as being anticipated by Eldon Hansen (*Global Optimization Using Interval Analysis*, Marcel Decker, Inc., New York, NY, 1992, hereinafter "Hansen"). Claims 1-5, 10, 13-14, 18-22, 27, 30-31, 35-39, 44, and 47-48 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 11, 8-9, 12-16, 22, 19-20, 23-27, 33, and 30-31, respectively, of copending Application No. 10/042,883.

Objections to the specification

The abstract was objected to because the abstract was written exceeding 150 words in length.

Applicant has amended the abstract to contain no more than 150 words. No new matter has been added.

The specification was objected to because the information in the related applications section needs updating.

Applicant has updated the related applications section.

Rejections under 35 U.S.C. §101

Claims 1-51 were rejected because the claimed invention was directed to non-statutory subject matter.

Applicant has amended independent claims 1, 18, and 35 to clarify that the present invention stores the function representation in the computer system

memory, and after performing the interval inequality constrained global optimization process on the interval representation to compute guaranteed bounds on a globally minimum value of the function, **records the guaranteed bounds** in system memory. Thus, the presentation performs a physical transformation by altering the state of the system memory. Hence, the claims as amended should now be statutory.

Rejections under 35 U.S.C. §102(b)

Claims 1-15, 18-32, and 35-49 were rejected as being anticipated by Hansen.

Applicant has amended independent claims 1, 18, and 35 to include allowable limitations from dependent claims 16, 33, and 50, respectively. Dependent claims 16, 33, and 50 have been canceled without prejudice.

Rejections under the doctrine of obviousness-type double patenting

Independent claims 16, 33, and 50 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting.

Applicant respectfully submits the attached terminal disclaimer to obviate any actual or provisional rejection under the judicially created doctrine of obviousness-type double patenting.

Hence, Applicant respectfully submits that independent claims 16, 33, and 50 as presently amended are in condition for allowance. Applicant also submits that claims 2-15 and 17, which depend upon claim 1, claims 19-32 and 34, which depend upon claim 18, and claims 36-49 and 51, which depend upon claim 35, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

Bv

Edward J. Grundler Registration No. 47,615

Date: 31 May 2005

Edward J. Grundler PARK, VAUGHAN & FLEMING LLP 2820 Fifth Street Davis, CA 95616-7759

Tel: (530) 759-1663 FAX: (530) 759-1665